

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 July 2005 (07.07.2005)

PCT

(10) International Publication Number
WO 2005/062642 A1

(51) International Patent Classification⁷: H04Q 7/32, 7/34

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CI, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/SE2003/002050

(22) International Filing Date:

22 December 2003 (22.12.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicant (*for all designated States except US*): TELEFONAKTIEBOLAGET LM ERICSSON (publ) [SE/SE]; S-164 83 Stockholm (SE).

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): LUNDsjÖ, Johan [SE/SE]; Lundagårdsvägen 41, S-163 51 SPÅNGA (SE). LARSSON, Peter [SE/SE]; Ballonggatan 2, S-169 71 SOLNA (SE). BERGSTRÖM, Joakim [SE/SE]; Erik Dahlbergsgatan 29 B, S-115 32 STOCKHOLM (SE). SIGNELL, Svante [SE/SE]; Ängsullsvägen 170, S-162 46 VÄLLINGBY (SE).

(74) Agent: DR LUDWIG BRANN PATENTBYRÅ AB; PO Box 17192, S-104 62 STOCKHOLM (SE).

Declaration under Rule 4.17:

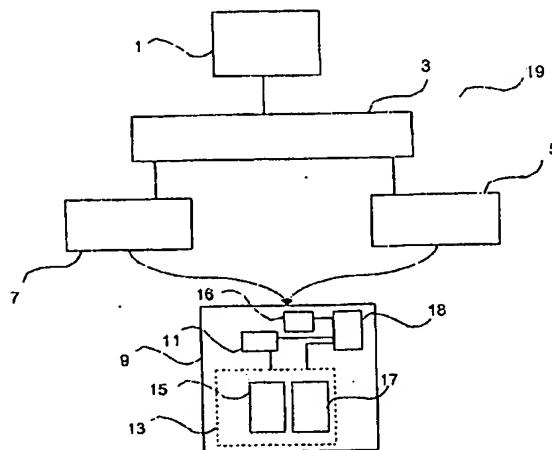
— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DOWNLOADING AND UPGRADING TERMINAL SOFTWARE OVER THE AIR OF A WIRELESS DEVICE



(57) **Abstract:** The present invention relates to a communication device (9) and a method that are capable of downloading and upgrading terminal software of the device (9) over-the-air in an efficient and fail-safe manner. The method for providing such a communication device (9) with radiosoftware from a server (1) via a wireless network (19) including a number of access networks (5, 7) comprises the steps of: initiating a download of radio software of a first radio access technology (15, 17) of the communication device (9); selecting a radio access technology (15, 17) of the communication device (9) for downloading the software; downloading the radio software via the available radio access technology (15, 17), wherein the radio software designed for the first radioaccess technology (15, 17) is stored in a memory space of the storing means (13). Furthermore, the present invention relates to a system in a wireless network (19) including such a communication device and a computer readable medium comprising instructions for executing the method according to the present invention.